OR 466219

Fig. 1

Fig. 2

FIG 38

FROM COMM. LINK → MANCHESTER / FSK DECODER (60) → PROTOCOL DECODER (62)   TEMPERATURE SENSOR (64)

SERIAL LINK (66)   PROCESSOR (68)   USER INTERFACE (70)

14

Fig. 3

TRANSMITTER (22) — 86 — VEHICLE GROUND (80) — 88 — RECEIVER (24)

12

82   84

Fig. 4

Fig. 5a

Fig. 5b

130
126
128
102
156
158
154
152
160
148
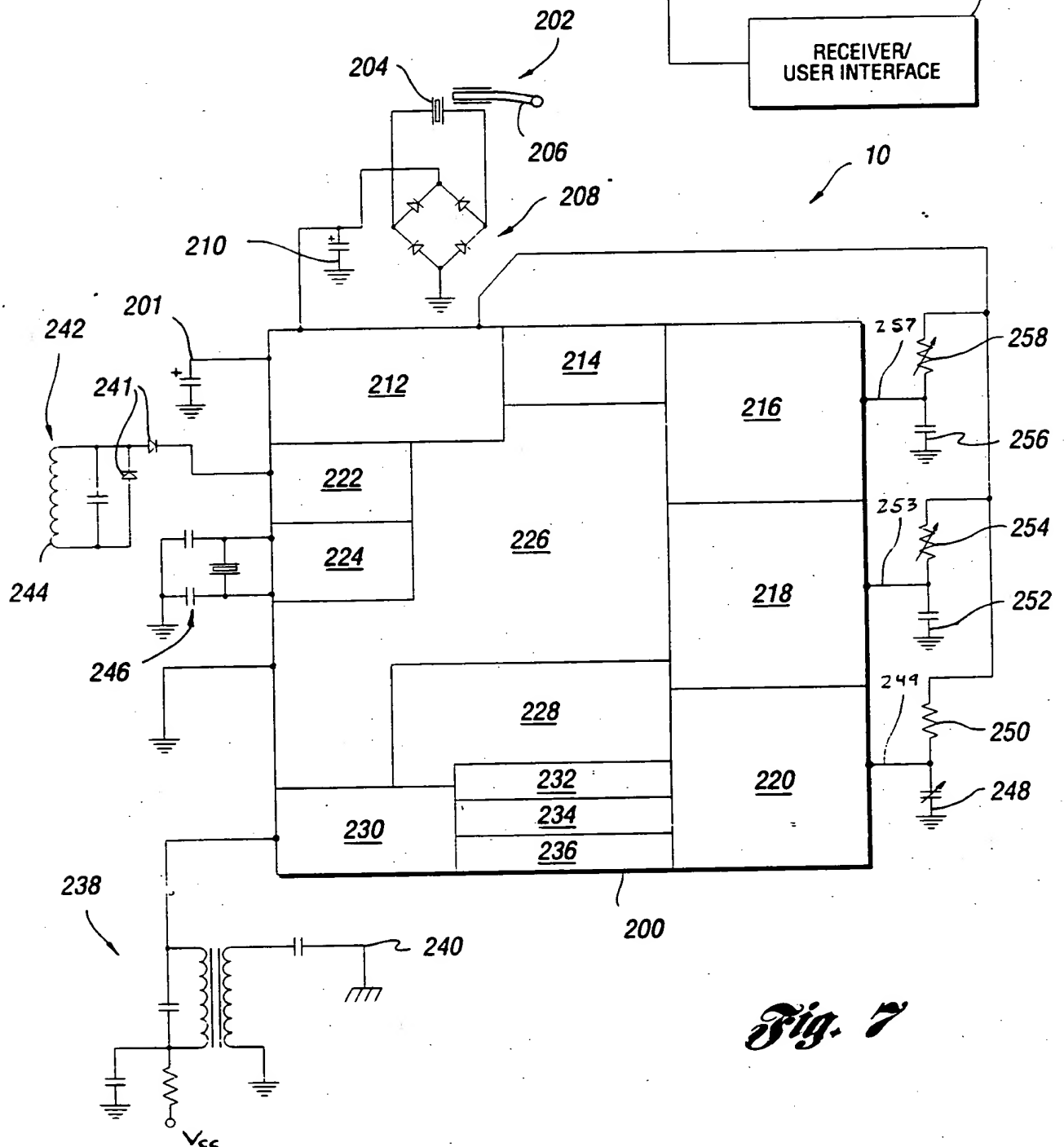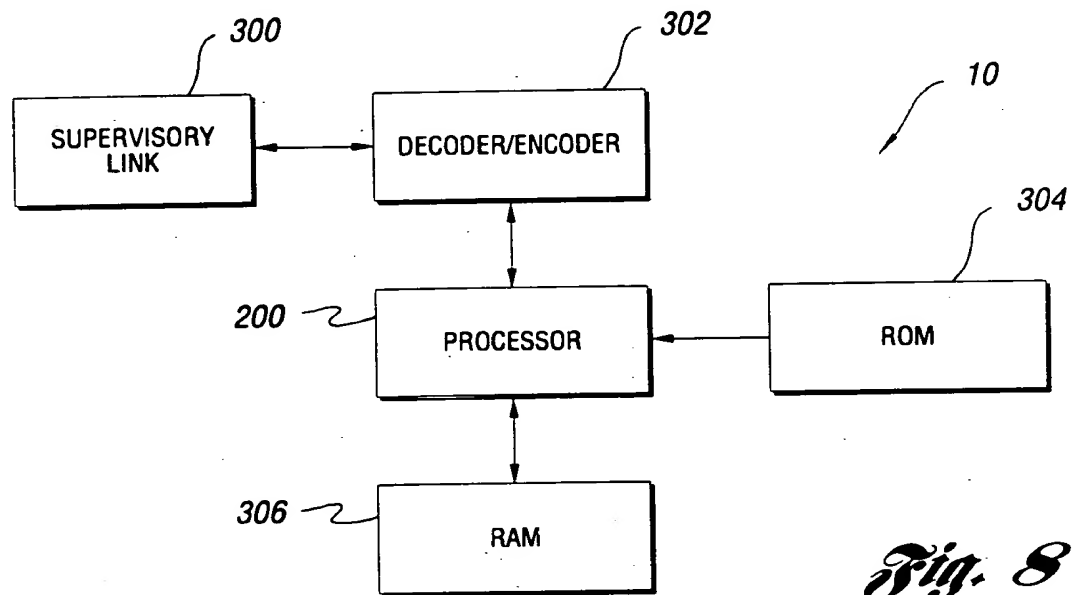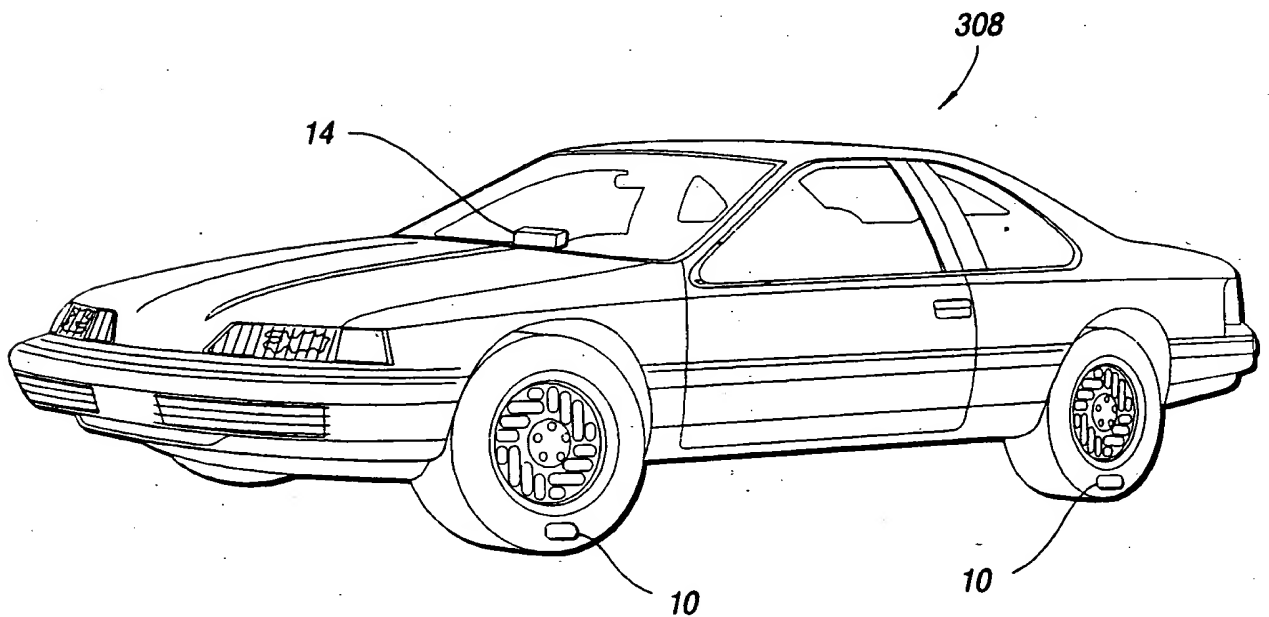150
145
140
142
144

A B C D E F G

Fig. 6

Fig. 7

Fig. 8

Fig. 9a

315

316

314

312   10

Fig. 9b

310 326 336 322 324 328 329
330   330
330   332
334   334
                                   338
342   340
312   314

Fig. 9c

OR 466219

Fig. 9d

Fig. 9e

Fig. 9f

Fig. 9g

PROGRAM	DATE	TIME	
1	2	3	MODE
L. FRONT	R. FRONT	PROB. FIX.	BUZZER
4	5	6	▲
L. REAR	R. REAR	SPARE	DRIVER #
7	8	9	▼
CLEAR	LOG	PRINT	
◀	▶	0	ENTER

Fig. 10

DR 466319

RS-232 CONTROL COMMANDS

INTERROGATES THE TPMS-3000 UNIT WITH ANY STANDARD
COMMUNICATIONS SOFTWARE. (I.E. XMODEM, SMART MODEM ETC.)

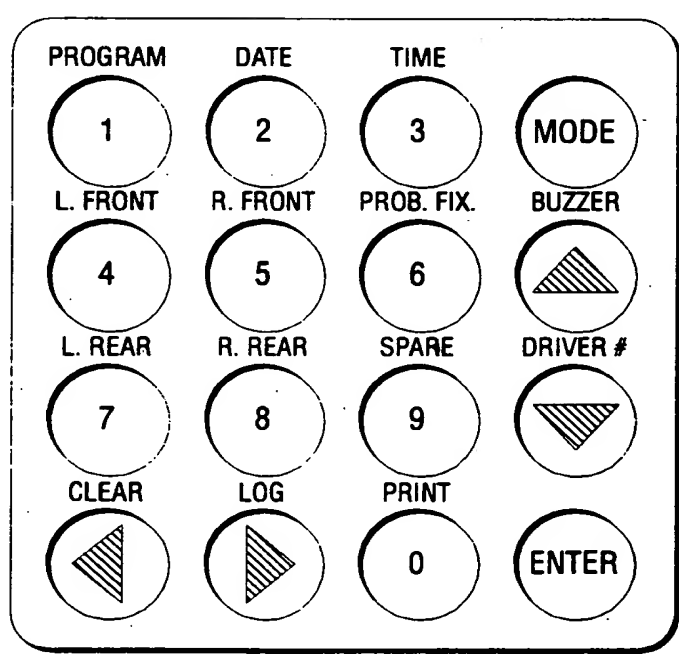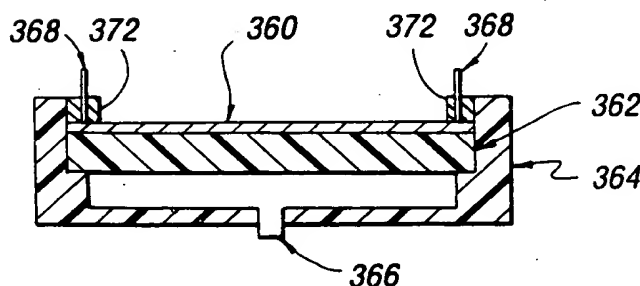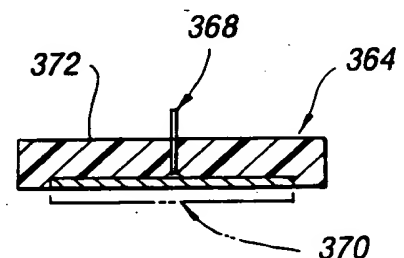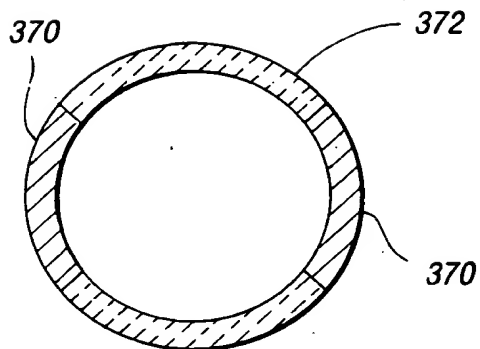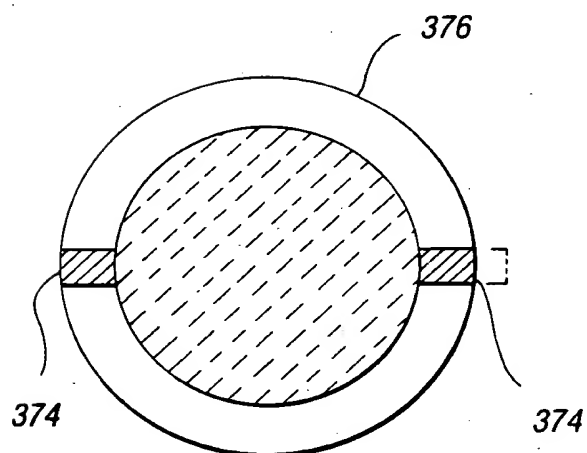| NAME	SYNTAX	FUNCTIONS
C	C<CR>	Read Software Version & Serial Number
D	Dddddddddddddddddddddddddd<CR>	Program Vehicle ID Code (24 Characters)
I	I<CR> <file>	Data to Program up to 256 Tires
L	LBB,EE<CR>	List Tire Alarms from Month bb to Month ee
N	Ndddddddd<CR>	Enter New Password
O	O<CR>	Output all Events and Reset Memory
P	P1mm,dd,yy<CR> P2hh,mm<CR> P3www,dddddddddddddddddd<CR>	1 = Program Date 2 = Program Time 3 = Program Tire Number and Label
R ·	R<CR>	Read all Events but do not Reset Memory Location
T	Tx<CR>	X = 1 Read Time and Date X = 2 Read all Tires and Labels X = 3 Read Vehicle ID X = 4 Raed Log Number X = 5 Read Driver Number
V	Vddddddddd<CR>	First Command to Send Before Requesting any Other Information ddddddddd = Password

Fig. 11

Fig. 12a

Fig. 12b

370 372

370

Fig. 12c

376

374 374

Fig. 12d

360

Fig. 12e

Fig. 13

RESISTANCE

PRESSURE

Fig. 14b

A

414

PROGRAM TIRES NOW
OR PRESS ENTER

402

Is
ENTER key
pressed
?

YES → W

NO

Delay: Wait 5 Seconds

416

418

HOW MANY TIRES:
TO PROGRAM: 005

422

Enter number of tires
tp program and
then press ENTER key

424

TIRE #: 005   TL:004
LEFT FRONT TIRE

426

Enter sensor
number and
label then
press ENTER
key

Is
ENTER key
pressed
?

NO

YES

B

DR 466219

Fig. 14a

START
POWER ON

400

TPMS 3000
VERSION: 1.0

402

Is
this the first
time ON
?

NO → W

YES

Wait 5 Seconds

404

406

ENTER DATE:
03-25-93

408

Enter date (i.e. 03-25-93)
then press ENTER key

410

ENTER TIME:
16:45

412

Enter time (i.e. 16:45)
then press ENTER key

A

NR 466219

Fig. 14c

B

428

SHOW TEMPERATURE
IN: 1=C° 2=F°   1

1   16

430

Press 1 (C°) or 2 (F°)
then press ENTER

432

SHOW PRESSURE IN:
1=PSI 2=KPG   1

1   16

434   402

Press 1 (PSI) or 2 (KPG)
then press ENTER key

W

Fig. 14b

W   402

NO   ALARM
Condition
?

YES

436

TPMS 3000
10:45   09-04-93

1   16

Flashing tire alarm
display with buzzer
beeping

438

W   402

C

Fig. 14e

440

C

LEFT FRONT TIRE
LOW PRESSURE

1 ... 16

Clear or
prob. fix. keys
pressed
?

YES → W

NO

Left
arrow key
pressed
?

NO

YES

442

TIRE # 055   28 PSI
115º F

1 ... 16

443

Wait 10 seconds

444

DRIVER #: XXXXXXXXX
XXXXXXXXXXXXXXXXXX

1 ... 16

Enter Driver # and
then press ENTER

446

D

Fig. 14f

D

446

ROUTE #: XXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

1 ··········· 16

Enter Route #
then press ENTER key

C

448

22

TRANSMITTER

454

ELECTROMAGNETIC
PATH

REPEATER

ALTERNATE
COMMUNICATIONS
LINK

450

452

RECEIVER

24

Fig. 15

464

452

462

460

REPEATER

+

468

466

TO
RECEIVER 24

Fig. 16

Fig. 17

472

476

470

474

500

Fig. 18a

500

Fig. 18b

100 us

Sync.

2 ms
20 Pulses

LSB

3 ms

4 ms
40 Pulses = 0

2 ms

6 ms
60 Pulses = 1

510

2 ms

4 ms
40 Pulses = 0

2 ms

6 ms
60 Pulses = 1

MSB

Fig. 19

520

522

522

522

524

1

4 5

11 12

18 19 — 25 26

30 31

19.716 ms

Word 4

Fig. 20a

Sync

212 us

424 us
212 us

= 0

= 1

636 ms

Word 1

Word 2

FRAME

SPACE

FRAME

19.716 ms

19.716 ms

19.716 ms

Fig. 20b